

## Pneumatic Heavy Material Trap

In case of minor contaminations, heavies in the feed material, if not eliminated from the product stream, will cause wear and tear in the recycling machines; in case of coarse foreign bodies it will lead to machine damage resulting in longer downtimes and loss of production.

Not only metal contaminants will have to be taken into consideration, but also bigger heavies, such as wood pieces, shoes, stones, rubber boots, and ceramic parts. Whereas ferric metals can be easily eliminated from the product stream with the help of overband magnets and magnetic drums, the traditional process steps for separating high-quality steel metals and coarse heavies are rather expensive and complex.

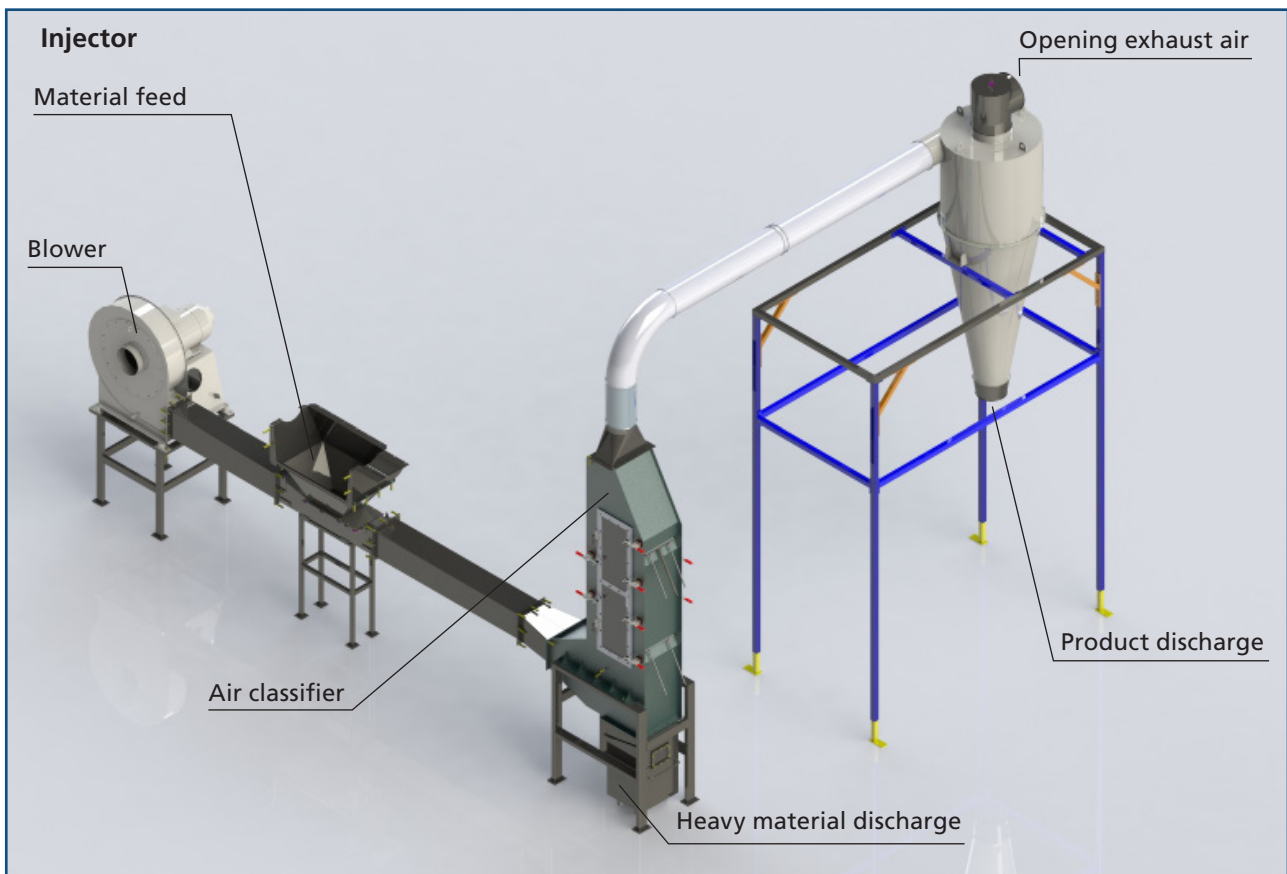
The Pneumatic Heavy Material Trap developed by HERBOLD is a reasonably priced, simple and efficient technical solution for separating coarse and massive heavies and an efficient protec-

tion against machine damage and the resulting downtimes.

The Pneumatic Heavy Material Trap can relatively easily be retrofitted and integrated into already existing plants.

Functional principal:

The feed material is pneumatically conveyed upwards in a feed pipe. In the ascending phase of the feed pipe is a downward discharge chute from where the heavies will fall into a container. The good material fraction leaves the Heavy Material Trap via a cyclone into the next process step. The coarse extraneous material compared to the good material has a lower conveying speed and is heavier, and therefore falls down from the discharge chute while the lighter material is conveyed upwards.





**Fig.1:** Example of separated heavies and extraneous material from good material PET bottles in a recycling plant.

**Field of application:**

Entire PET bottles from a waste sorting plant, rigid plastics from commercial or consumer waste and similar feed materials.

**Pneumatic Heavy Material Trap in a plant**



**Fig.2:** Injection blower, feed pipe cyclone separator.



**Fig.3:** Ascending pipe with discharge chute and for discharging the good material in a ballistics

**Technical Data**

Typ	Capacity	Injector	Feed pipe Ø	Cyclone separator Ø
SAP 300	until 4000 kg/h*	30 kW	300 mm	1000 mm
SAP 560	until 7000 kg/h*	40 kW	560 mm	2350 mm

\* Capacity depending on the feed material

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**Herbold Meckesheim GmbH** • Fon: + 49 6226 932-0 • Mail: herbold@herbold.com • Web: www.herbold.com

**Herbold Meckesheim USA** • Fon: + 1 401 597 5500 • +1 888 612 RRSI (7774) • Mail: info@herboldusa.com • Web: www.herboldusa.com

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